



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D2580-1

Job Sheet 216514



Part No: D2580-1

Job Qty: 4 pcs

Part Name: 205 Bent Tube



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 12/11/20

Job Tracking No:

Due Date: 12/31/20

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG D2580 REV h SHEETS 1,2,3,8 IPP B 01.11.08 Revised Step 9, 10, 12, and 13 SM IPP Rev:C 10.12.01
as per DEO D1 DD ver:ec

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Lead Time	Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier			
100	Skidtubes - 1	4		12/30/20	0.00	4.00	Skidtubes - SCH-S			
		pcs								
101	QC 5	4		12/30/20	0.00	0.00	QC 5 - SCH-B			
		pcs								
110	Handfinish - 1-1 Chemical-B4B	4		12/30/20	0.00	1.50	Handfinish - 1 - 1 - B4B			
		pcs					Handfinish - 1 - 2 - B4B			
							Handfinish - 1 - 3 - B4B			
							Handfinish - 1 - 4 - B4B			
							Handfinish - 1 - 5 - B4B			
							Handfinish - 1 - 6 - B4B			
							Handfinish - 1 - 7 - B4B			
							Handfinish - 1 - 8 - B4B			
							Handfinish - 1 - 9 - B4B			
							Handfinish - 1 - 10 - B4B			
							Handfinish - 1 - 11 - B4B			
							Handfinish - 1 - 12 - B4B			
							Handfinish - 1 - 13 - B4B			
							Handfinish - 1 - 14 - B4B			
							Handfinish - 1 - 15 - B4B			
							Handfinish - 1 - 16 - B4B			
							Handfinish - 1 - 17 - B4B			
							Handfinish - 1 - 18 - B4B			
							Handfinish - 1 - 19 - B4B			



Dart Aerospace Ltd.
1270 Aberdeen Street
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CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S322051



Part: D2580-1

Job No: 216514

Serial No/Batch: S322051

Revision: H

Inspector:

Exp Date:

Instructions: Various STC's

Date: 12/16/20

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				Handfinish - 1 - 20 - B4B	
				Handfinish - 1 - 21 - B4B	
				Handfinish - 1 - 22 - B4B	
120 QC 7	4 pcs	12/30/20	0.00 0.00	QC 7 - SCH-B	DEC 2 1 2020
125 Skidtubes - 2 - B4B	4 pcs	12/31/20	0.00 1.65	Skidtubes - SCH-B	20.12.21
130 QC 5	4 pcs	12/31/20	0.00 0.00	QC 5 - SCH-B	DEC 2 2 2020
140 Packaging 3-1 - Stock - B4B	4 pcs	12/31/20	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	20.12.22
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
				Packaging 3 - 37 - B4B	
150 QC 21 - SA	4 pcs	12/31/20	0.00 0.00	QC 21 - SA - SCH-B	DEC 2 2 2020

Part Op 100 - (Skidtube) 1- Inspect mat'l D2500-1-190 for damage. 2-Drill pilot holes using drill jig DT 8149 A-BC-D 3-Open holes Descriptions: to 0.508" as per Dwg D2580 4-Debur holes per QSI002 section 4.2.3 and blow out all chips from inside of tube 5- Test fit inspection saddles on FWD & AFT saddle holes using DT9916.

101 - (QC5- Inspect part completeness to step on W/O)

110 - (Chemical Conversion Coat per QSI005 4.1)

120 - (QC7-Inspect Chemical Conversion Coat)

125 - (Skidtube) 1- Bond web in place per QSI 015. A/R Sikaflex-291 batch: 5319033 Sikaflex expire date: 20.12.21 Start time and date: 4pm bond for 12hrs 20.12.22. 10AM

130 - (QC5- Inspect part completeness to step on W/O)

140 - (Identify as per dwg & Stock Location: LG002) LOCATION: LG002

150 - (QC21- Final Inspection - Work Order Release)

DAS
82
9-89DAS
32
9-89

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
D2500-1-190	Ext'n - 1" Beam Tube 4"	4 pcs (1 ea)	100-Skidtubes - 1	5282211
D2596	Web, 205 Skidtube	4 pcs (1 ea)	125-Skidtubes - 2 - B4B	5321837
Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Skidtubes - 1	D2500-1-190	4	15	0
125-Skidtubes - 2 - B4B	D2596	4	0	0
Part Specifications				
Specifications could not be found.				

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ITEM	QTY -041	QTY -043	QTY -047	QTY -049	PART NUMBER	DESCRIPTION
1	X				D2580-041	SKIDTUBE ASSEMBLY
2		X			D2580-045	SKIDTUBE ASSEMBLY
3			X		D2580-047	SKIDTUBE ASSEMBLY
4				X	D2580-049	SKIDTUBE ASSEMBLY
20	1	1	1	1	D2500-1-190	EXTRUSION
21			16	16	D2570	BUSHING
22	1	1	1	1	D2579-3	STEP
23		4			D2579	SPACER
24	16	16	8	8	D2594-1	PLUG
25	16	16	8	8	D2594-3	O-RING
26	1	1	1	1	D2596	205 WEB
27	1	1	1	1	D2855	AFT CAP
28	1	1			D3564-5	WEARSHOE
29	1	1			D3564-9	WEARSHOE
30	1	1			D3564-11	WEARSHOE
31	1	1			D3564-13	WEARSHOE
32	20	20	24	24	D4202-1	SPACER
33			1		D4406-041	WEARPLATE ASSEMBLY
34			1		D4406-043	WEARPLATE ASSEMBLY
35				1	D6061-1	FWD WEARPLATE
36				1	D6061-3	AFT WEARPLATE
60	50	50			ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
51	50	50			AN3C4A	BOLT
52	2	2	2	2	AN3-5A	BOLT
53			8	8	AN4-45A	BOLT
54	50	50			NAS1149C0332R	WASHER (AN960C10L)
55	2	2	2	2	NAS1149D0332J	WASHER (AN960JD10L)
56			8	8	MS21042-4	NUT (OR MS21042L4)

GENERAL NOTES:

- MATERIAL: N/A
- FINISH: CHEMICAL CONVERSION PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT (-041/-047/-049) GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
POWDER COAT (-045) GREEN SANDTEX (REF 4.3.5.6) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4.
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- UNITS: INCHES UNLESS OTHERWISE NOTED.
- BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- IDENTIFICATION: NONE
- WEIGHT: D2580-041 = 33.7 lbs
D2580-045 = 33.7 lbs
D2580-047 = 45.1 lbs
D2580-049 = 32.0 lbs
- WELDING PER DART QSI 004.
- INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- USE DART DRILL TEMPLATE DT8217 & DT8637 ONLY FOR D2580-041/-045 TO LOCATE AND DRILL 20.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTIONS B-B AND F-F (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241-291.
- INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES FOR D2580-041/-045 AND 8 PLACES FOR D2580-047/-049)
- IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 216514 ML5
20-12-11

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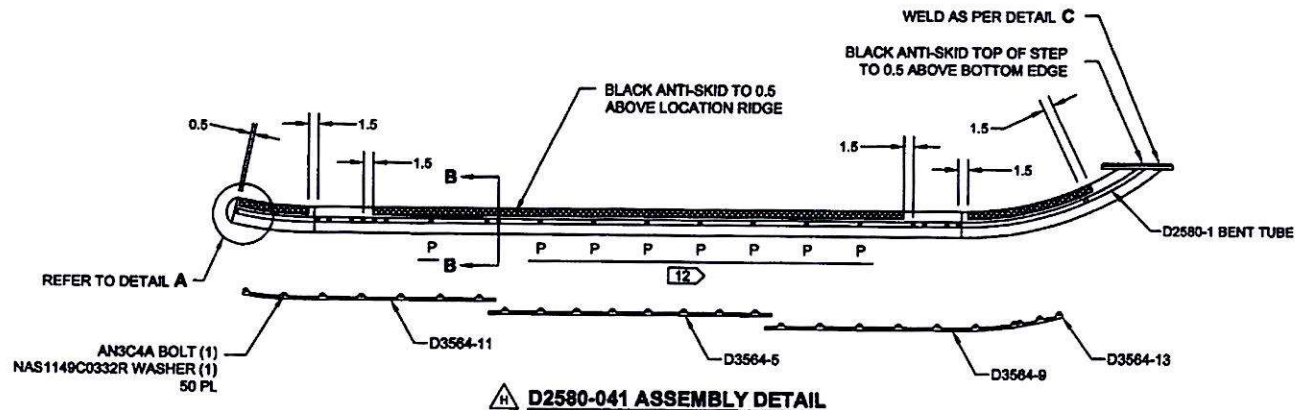
2017 JUL 05
BENIT-SUR

H	SHEET : PL DELETE D3566-1/-5/-13 GASKETS, WEIGHTS UPDATED ACCORDINGLY. SHEETS 2 & 4 PICTORIAL UPDATE FOR REMOVAL OF GASKETS	SAD	17.06.09
G	ADDED -049, -047 WEIGHT UPDATED PER DSI 9598	AJS	14.04.09
F	INCORPORATE DEO D2580-E-1 PER PART2-218	DC	13.06.20
E	ADD D2580-047 (ZN C4-7) AND D2580-7 (ZN B3-8); INCLUDED DEO D2580-D-1; REFORMATTED DRAWING TO CURRENT STANDARDS; DT8217 & DT8637 WAS TD2577-205 (ZN C4-1)	RF	11.06.21
D	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	PH	07.04.06
C	REDRAWN, INCLUDED DEO 9094/9097	CP	06.06.28
B	AS MANUFACTURED	DS	06.12.02
A	NEW ISSUE	DS	06.06.16
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	SAD		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	17.06.09		

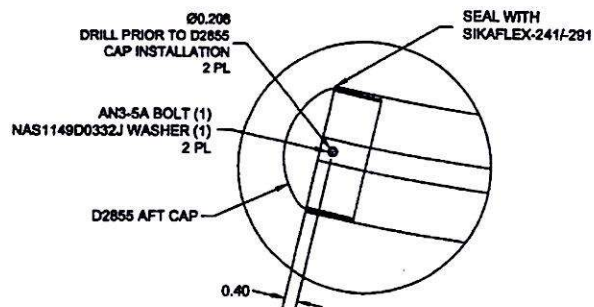
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HAWKESBURY, ONTARIO, CANADA

DRAWING NO.
D2580
REV. H
SHEET 1 OF 9
TITLE
205 SKIDTUBE ASSEMBLY
SCALE
NTS

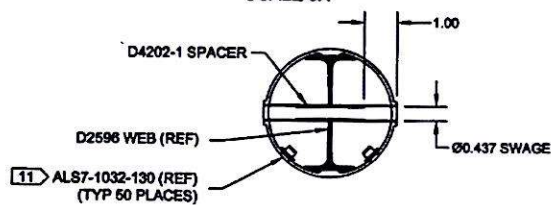
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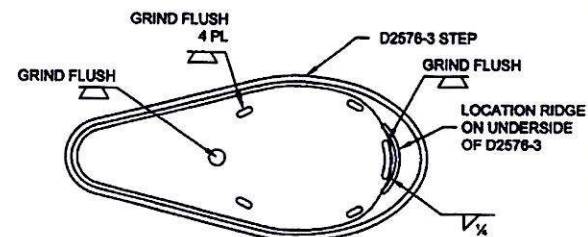


SECTION B-B
SCALE 5X



AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. INSERT D4202-1 SPACER (20 PLACES)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM / GRIND FLUSH PER QSI 002

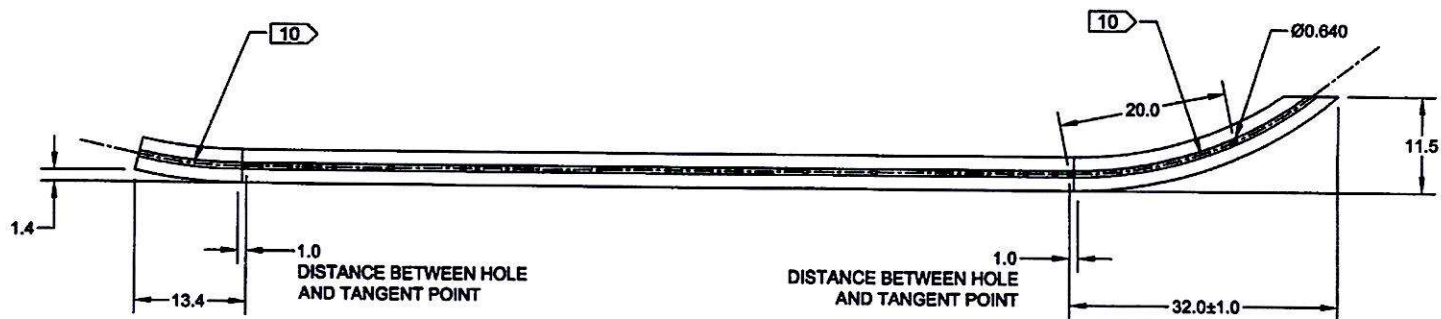
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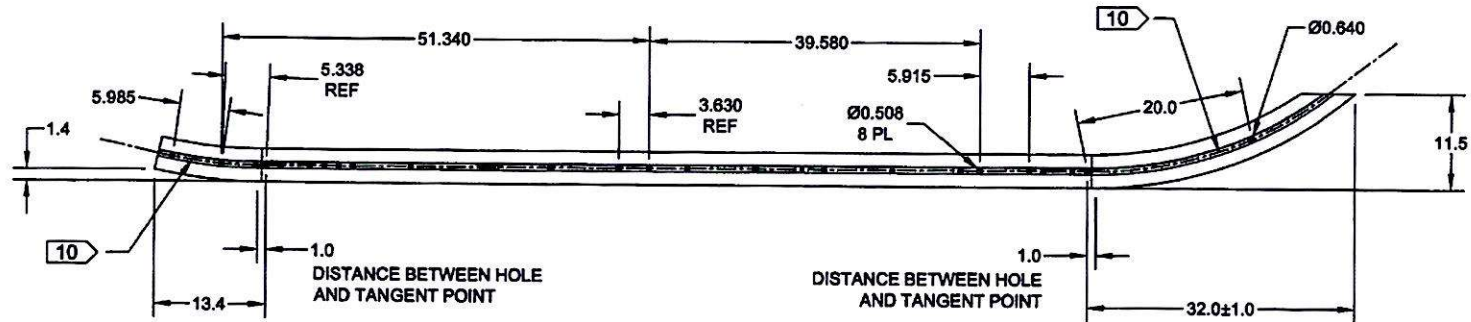
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D2580-1 BENT TUBE
(MAKE FROM D2580-101 TUBE)

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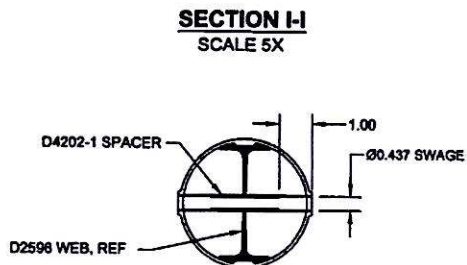
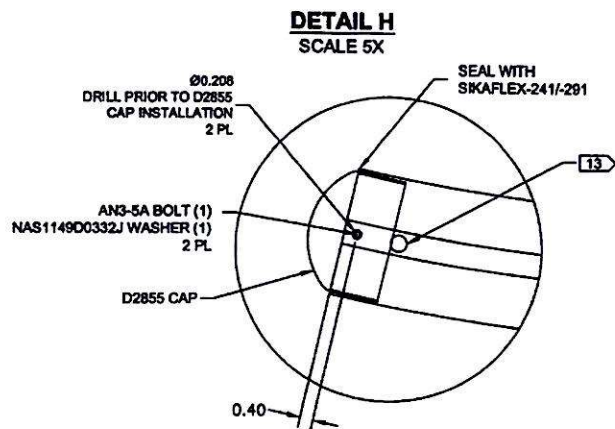
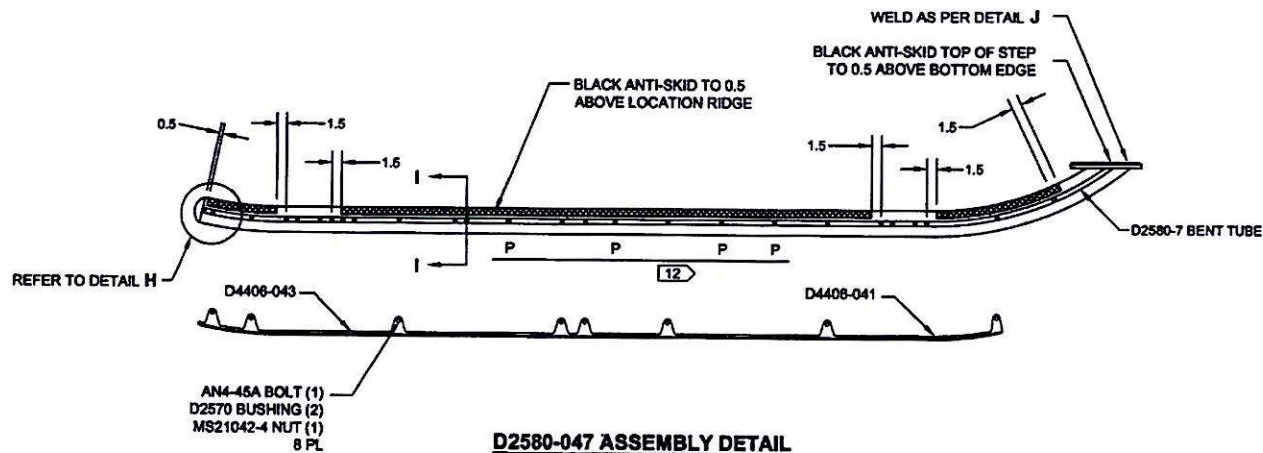


D2580-5 BENT TUBE
(MAKE FROM D2580-101 TUBE)

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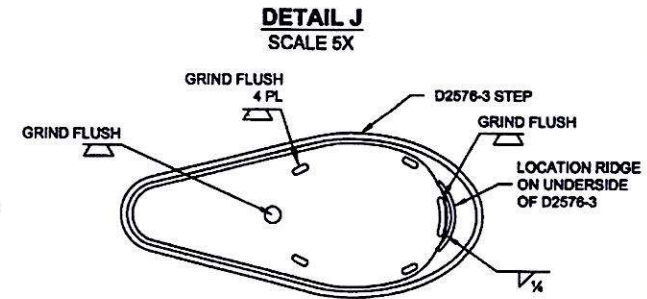
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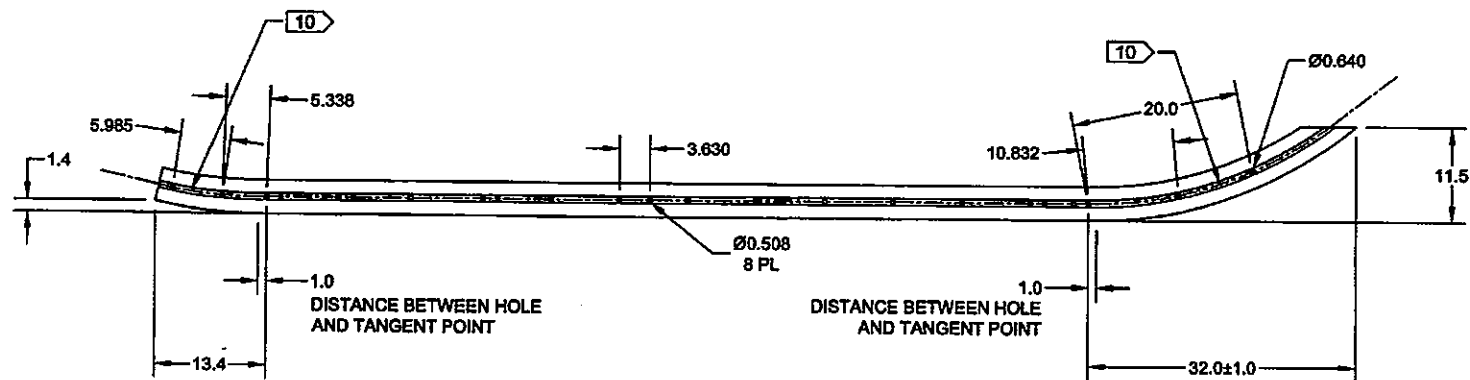
AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

1. INSERT D4202-1 SPACER (24 PLACES)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM/GRIND FLUSH PER QSI 002



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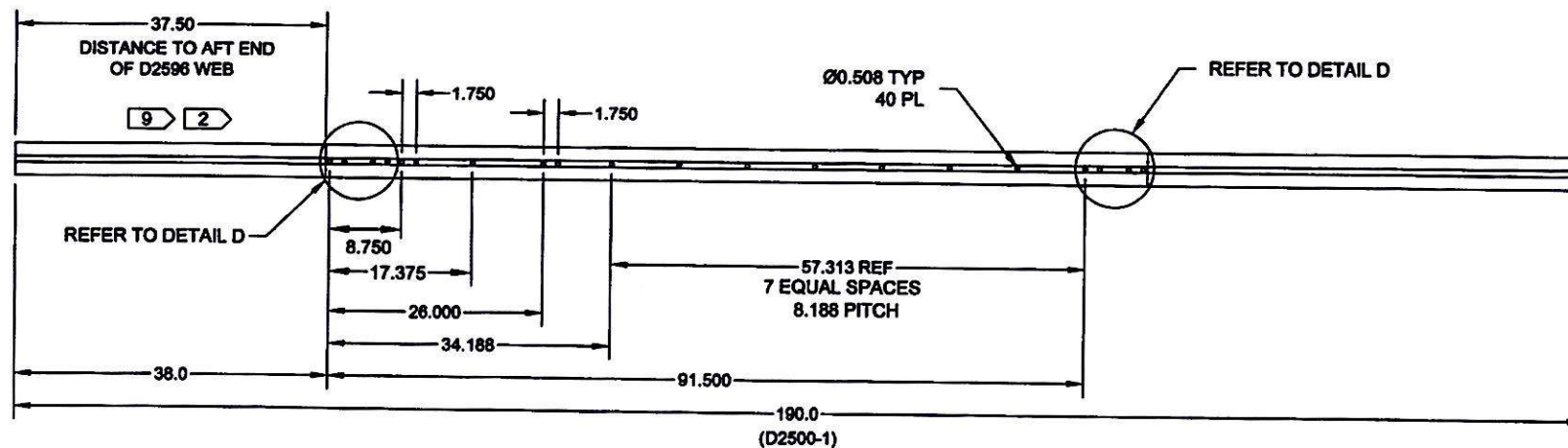
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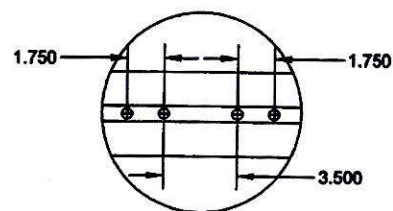
D2580-7 BENT TUBE
(MAKE FROM D2580-101 TUBE)

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D2580-101 TUBE



DETAIL D
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8 7 6 5 4 3 2 1

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					